

Fig. 1a

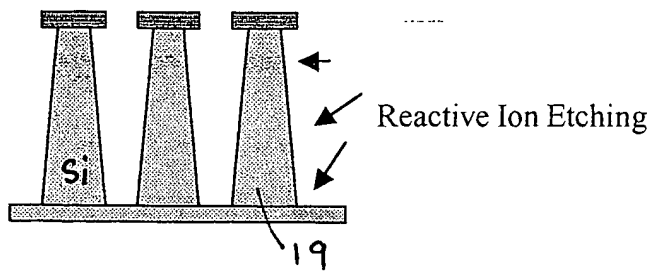
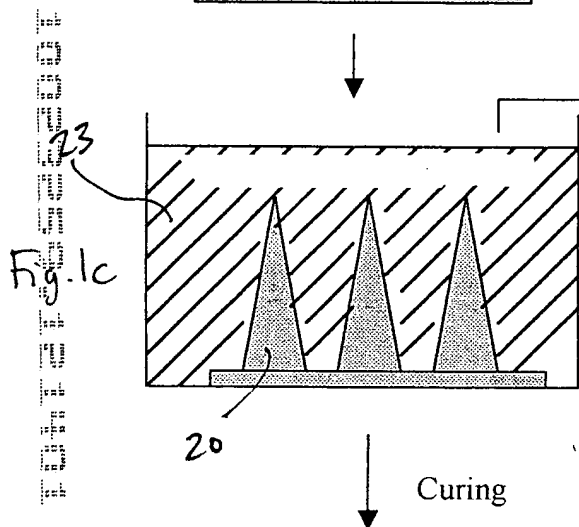
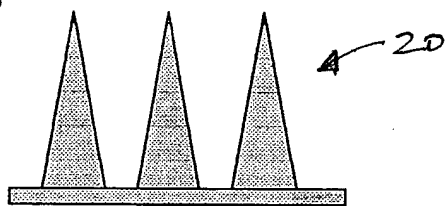


Fig. 1b



Vacuuming

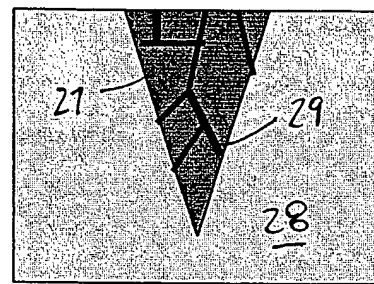
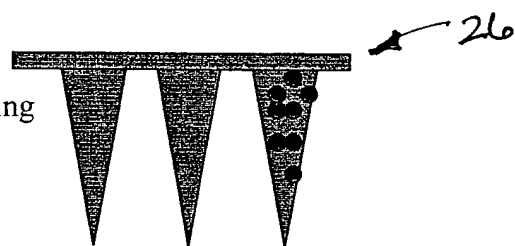


Fig. 1d

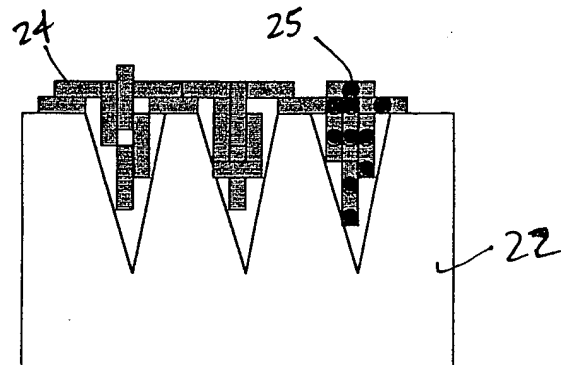
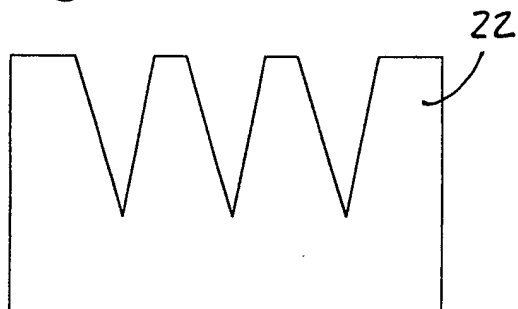
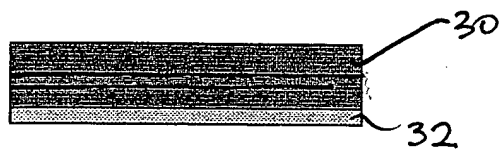


Fig. 1e

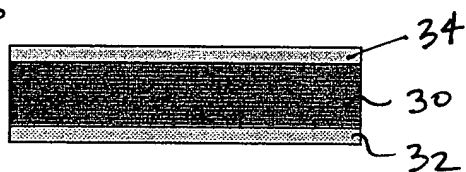
Fig. 1

Fig. 2a



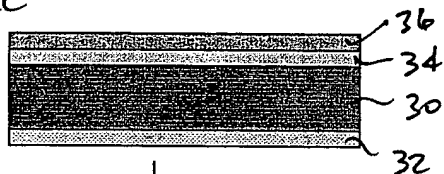
Aluminum deposition

Fig. 2b

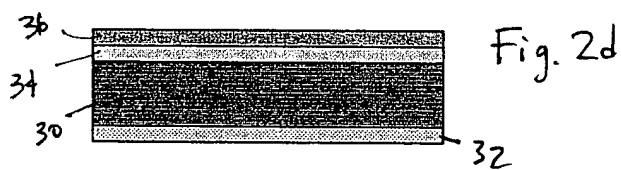


Photoresist Coating

Fig. 2c

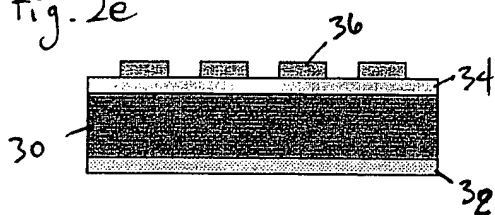


UV Exposure

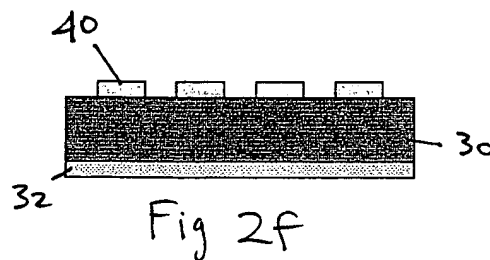


Developing

Fig. 2e



Al etching



Reactive Ion Etching

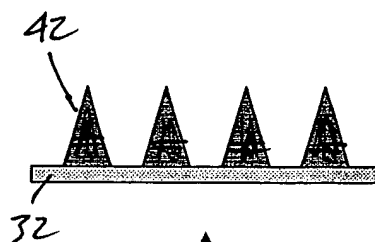


Fig. 2g

Fig. 2

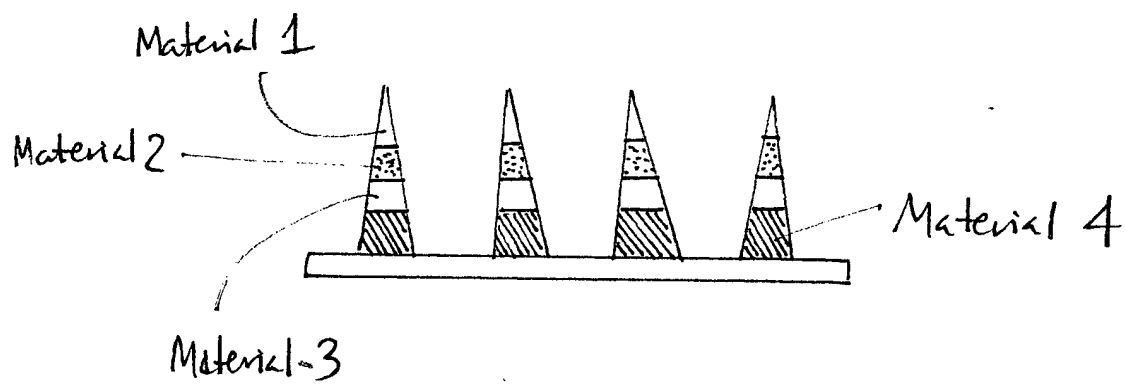


Fig. 3

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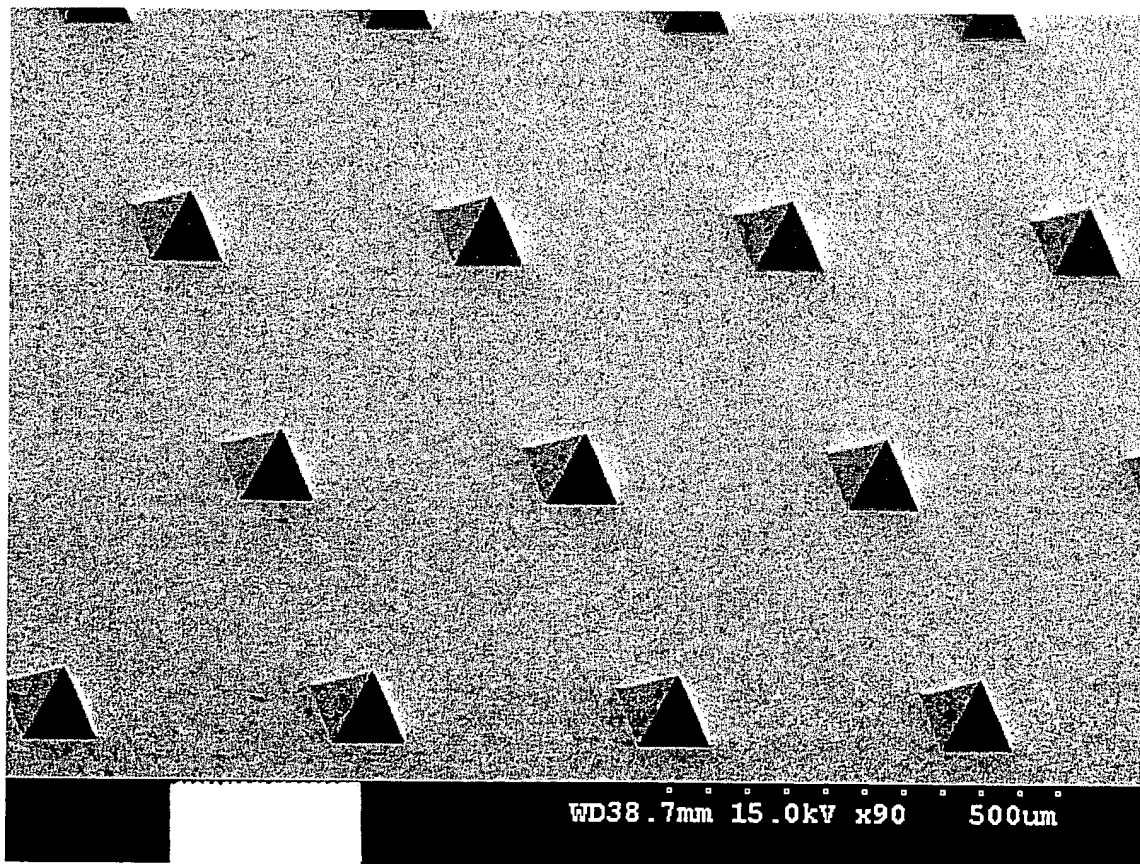


Figure 4

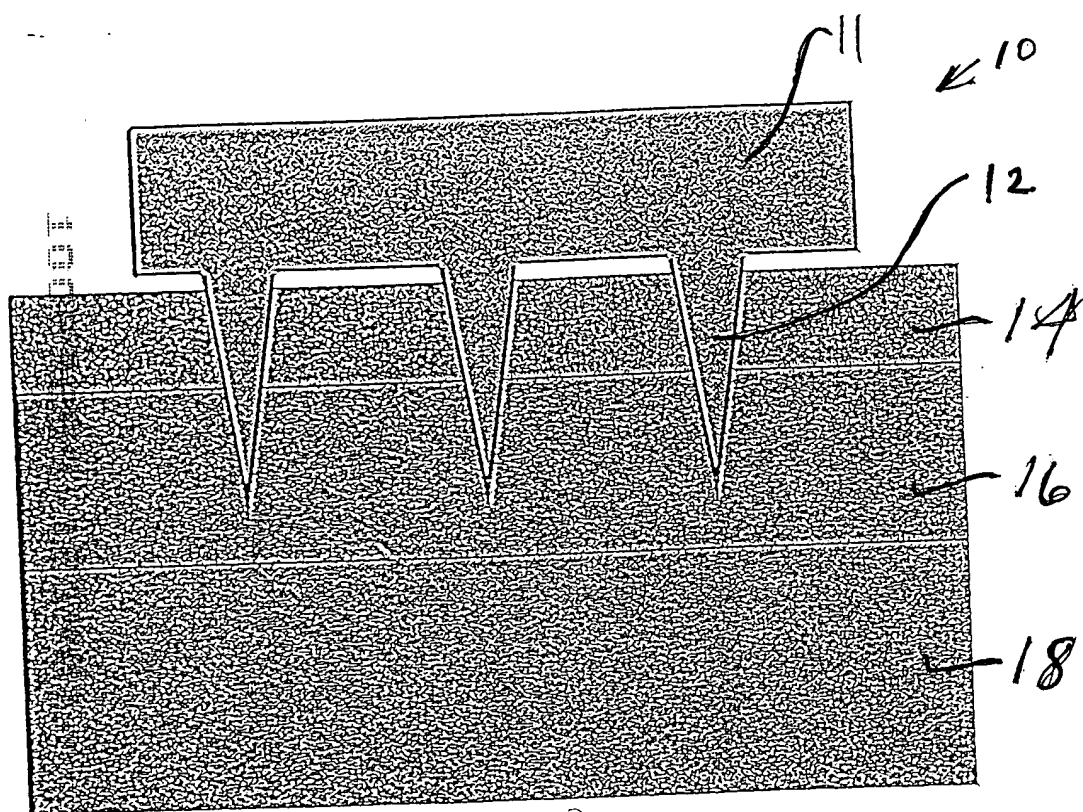


Fig. 5

Fig. 6

Fig. 6a

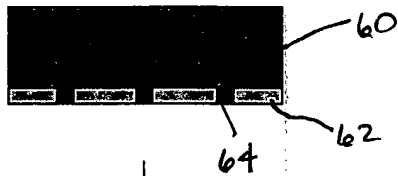


Fig. 6b

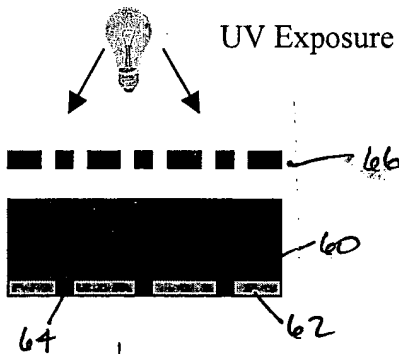


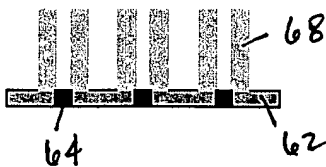
Fig. 6c



Developing of
Non-X-linked SU-8



Fig. 6d



Silicone mold
(Poly-dimethyl siloxane)

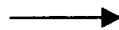
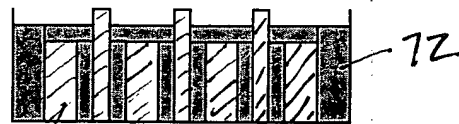


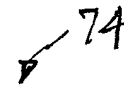
Fig. 6f



Molding



Fig. 6g



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Fig. 6e

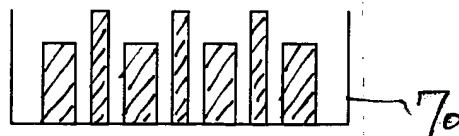


Figure 7

Fig. 7a



Fig. 7b

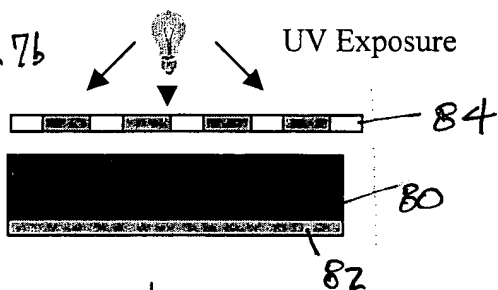
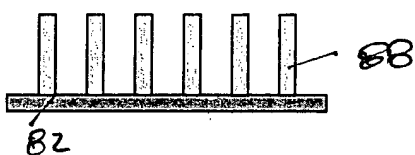


Fig. 7c



Developing of
Non-X-linked SU-8

Fig. 7d

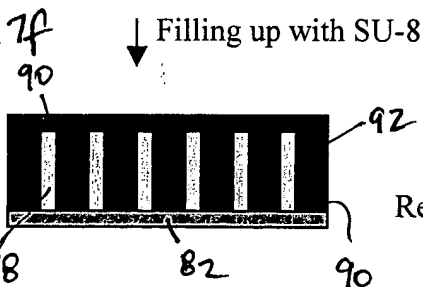


Metal Deposition

Fig. 7e



Fig. 7f



Reactive Ion Etching

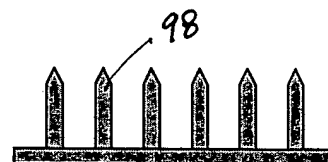


Fig. 7k

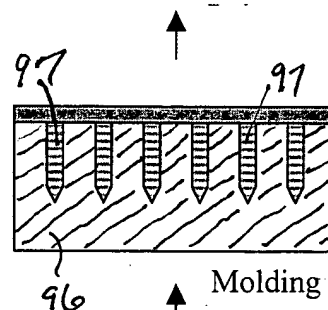


Fig. 7j

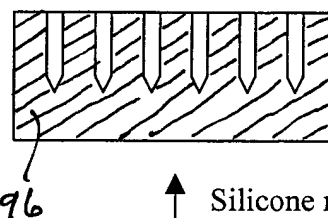


Fig. 7i

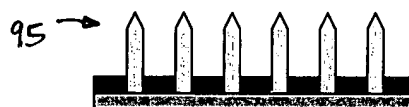


Fig. 7h

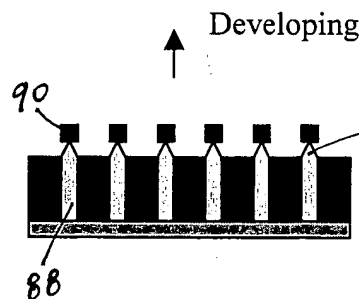


Fig. 7g

Figure 8

Fig. 8a

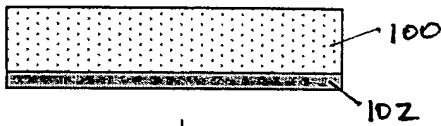


Fig. 8b

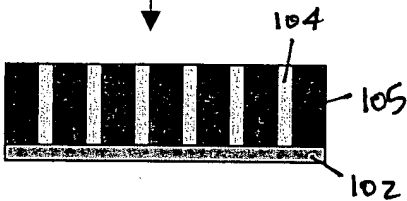
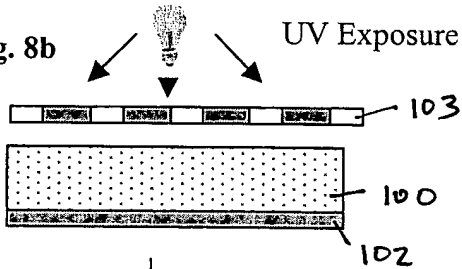


Fig. 8c

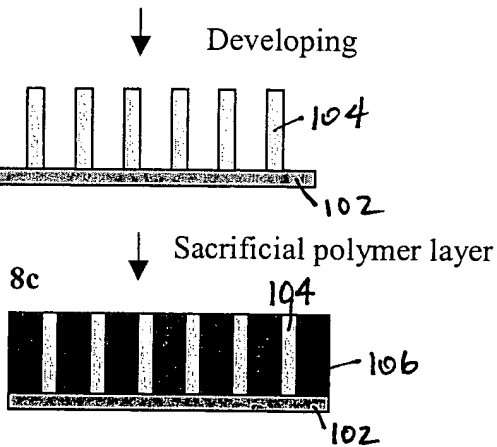


Fig. 8d

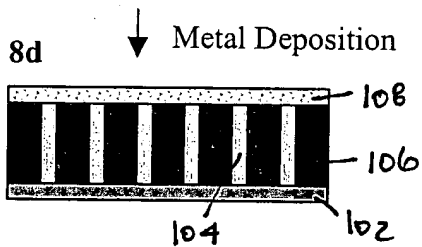
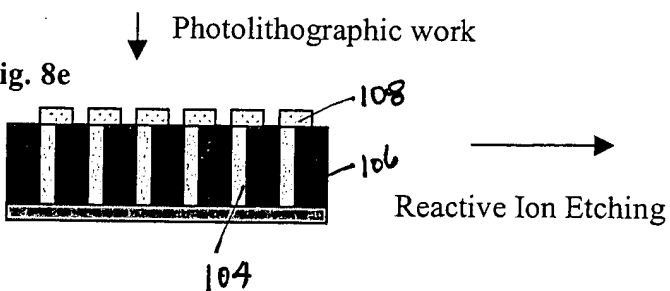


Fig. 8e



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Fig. 8i

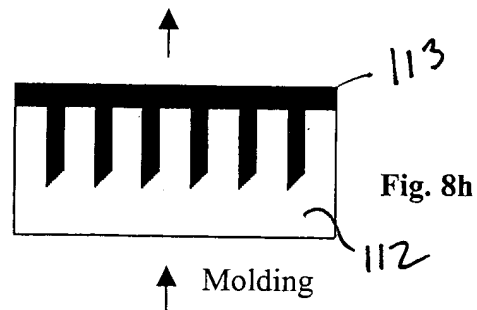


Fig. 8h

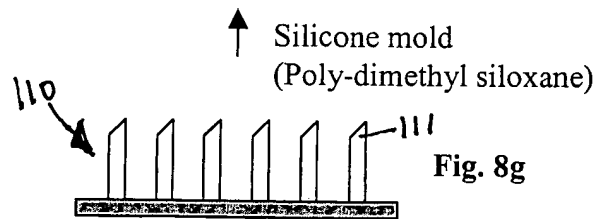


Fig. 8g

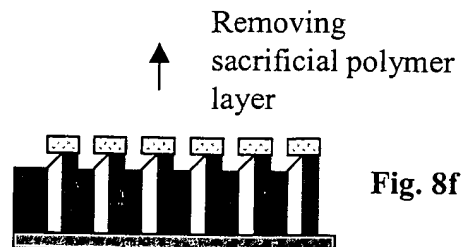
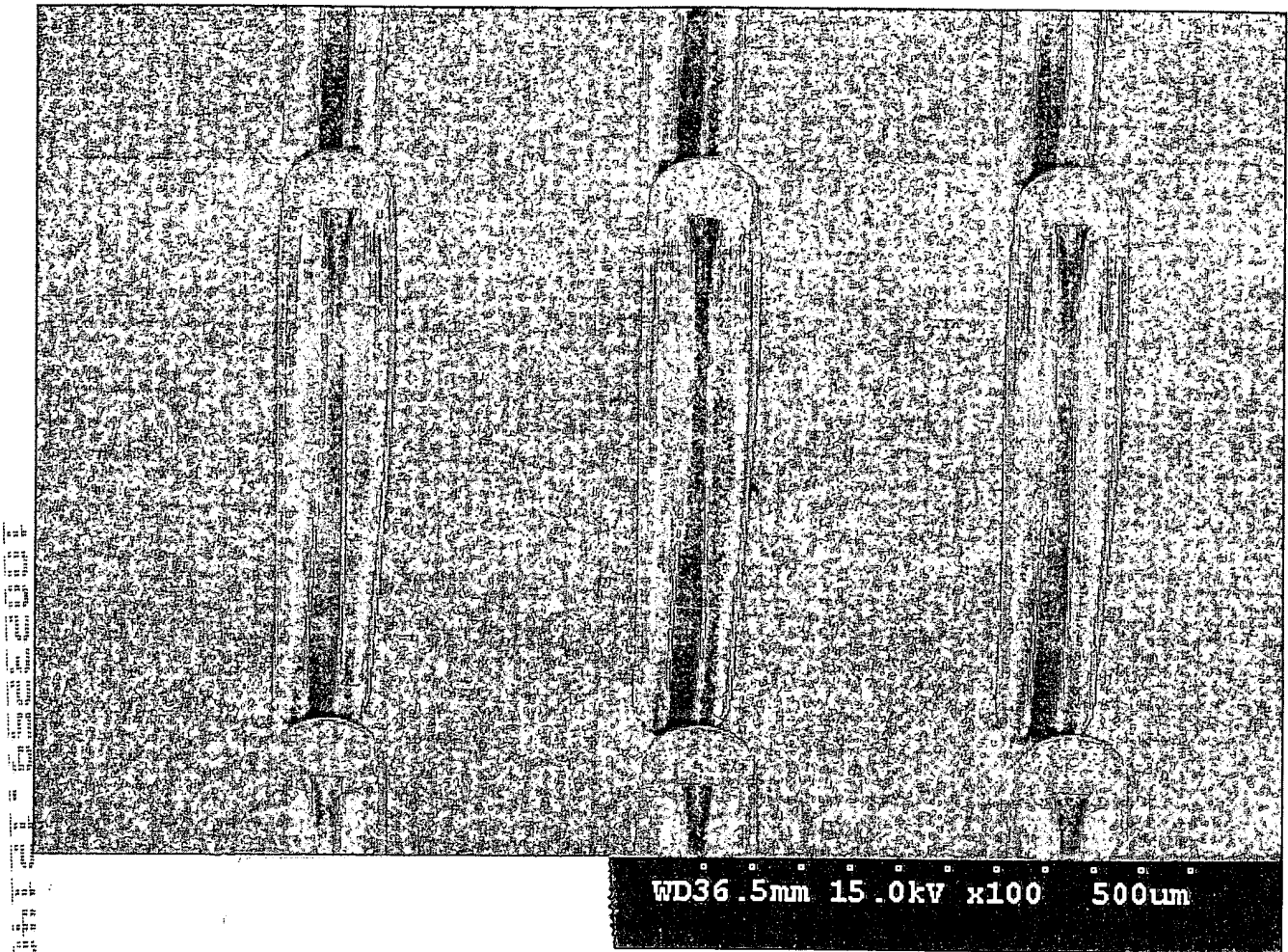
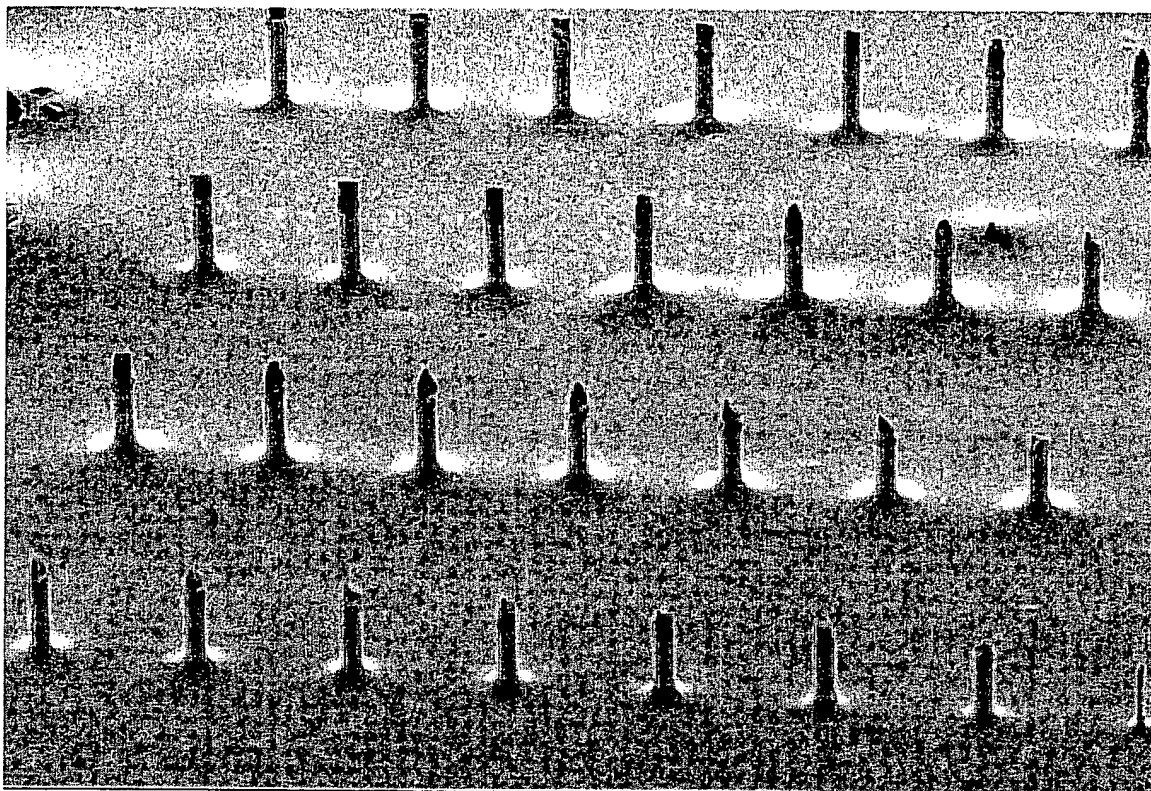


Fig. 8f



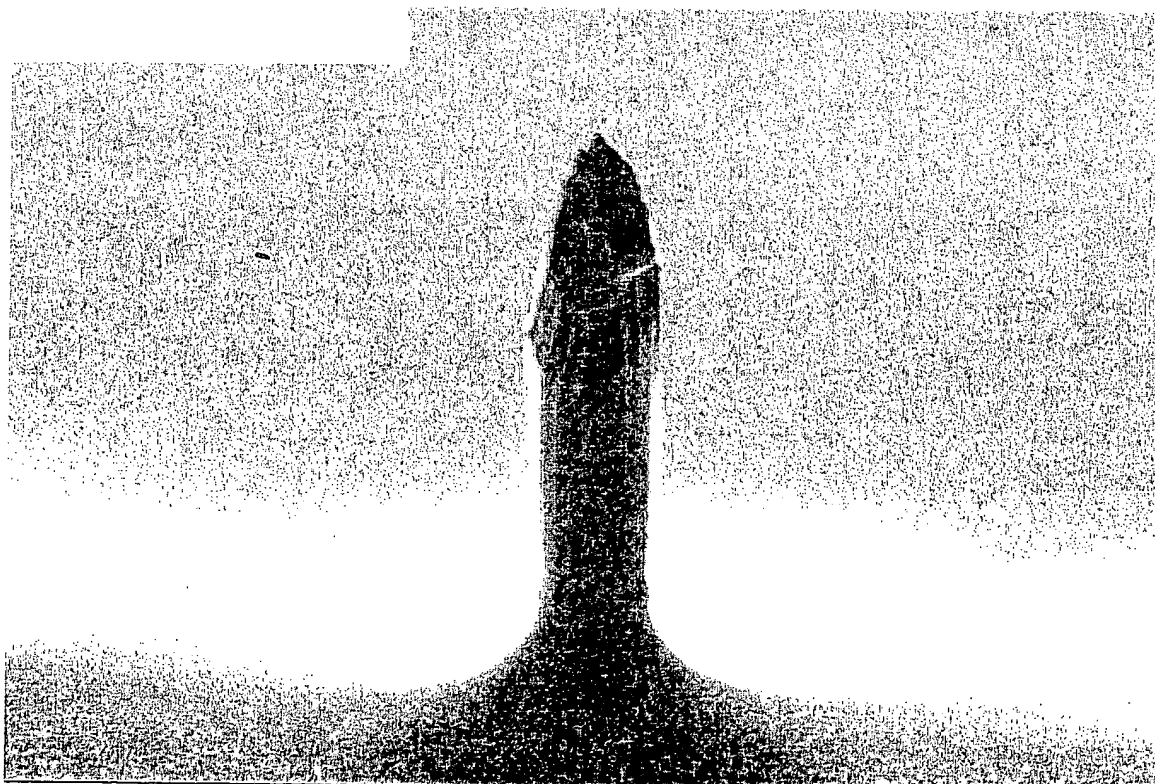
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Fig. 9



WD38.9mm 10.0kV x25 2mm

Fig. 10a



WD36.6mm 10.0kV x150 200um

Fig. 10b

Figure 11

Fig. 11a

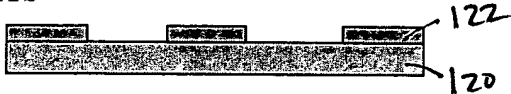


Si₃N₄ Deposition

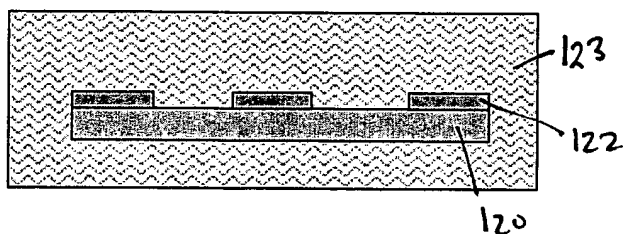


Photolithographic work +
Reactive ion etching

Fig. 11b

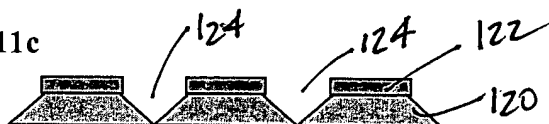


Put wafer in 33% KOH



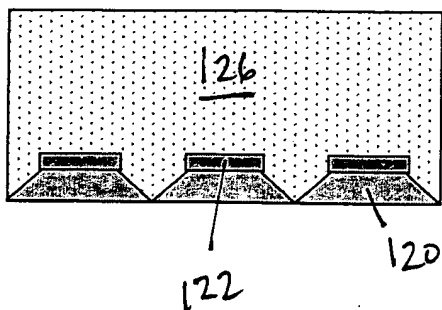
KOH wet etching

Fig. 11c



SU-8 epoxy filling

Fig. 11d



Photolitho-
graphic work

Fig. 11g

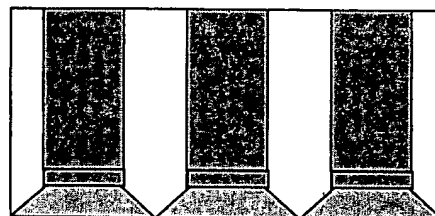
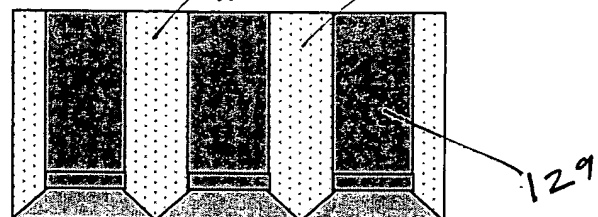
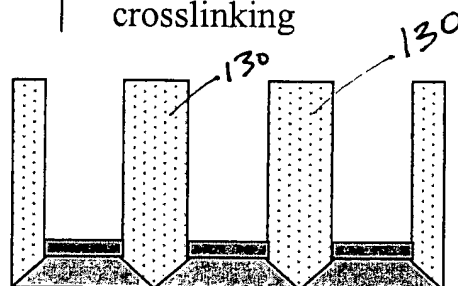


Fig. 11f



Reactive ion etching

PDMS pouring +
crosslinking



Developing

Fig. 11e

